

School-Year Academic Youth Development, 2016-2017

Agile Mind Topics	Time Allotted	Topic Descriptions	Materials
Online services contain comprehensive instruction, assessment, testing, and professional services	Suggested time allotment 1 block = 30 min		

Throughout this course, students develop expertise in problem-solving and mathematical practices consistent with the Common Core State Standards. In particular, students make sense of problems and persevere in solving them (CCSS Standard for Mathematical Practice 1) and attend to precision (CCSS Standard for Mathematical Practice 6) in constructing viable arguments and critique the reasoning of others (CCSS Standard for Mathematical Practice 3).

Core Youth Development Content

1. Building relationships to learn	5-6 blocks	This topic sets the stage for the Academic Youth Development (AYD) course. Students begin to experience collaboration as a strategy to solve problems. All students are encouraged to participate in a short pre-survey of their attitudes and beliefs.	<ul style="list-style-type: none"> •6 small balls, beanbags, or Koosh balls per 15 students •2 balloons per student •Student Activity Sheets •Chart paper and markers •Sticky notes •Dry spaghetti and miniature marshmallows
2. Your brain changes when you learn	4 blocks	This topic introduces students to the ideas of malleable intelligence and brain growth through learning.	<ul style="list-style-type: none"> •Colored ribbon or armbands to mark students as belonging to one of two groups •Student Activity Sheets •Chart paper and markers •Sticky notes
3. How effort affects your brain	6 blocks	Students learn about the concept of working harder to get smarter, and they apply this idea to their other classes.	<ul style="list-style-type: none"> •Student Activity Sheets •Chart paper and markers •Sticky notes •Modeling clay •Wire or pipe cleaners
4. The learning experience	4 blocks	This topic focuses on the experience of learning and feelings associated with learning, building upon the previous topic in which students learned that they can get smarter with hard work and effective strategies.	<ul style="list-style-type: none"> •Student Activity Sheets •250 matchsticks or toothpicks per 15 students •Chart paper and markers •Sticky notes
5. Thinking about thinking	4-6 blocks	In the previous topic, students learned that effort was the route to increased intelligence. In this topic, students learn that not all effort is equal, and discover specific strategies they can use to ensure that they are using effective effort as they learn.	<ul style="list-style-type: none"> •Student Activity Sheets •Chart paper and markers •1 Towers of Hanoi game per 2-3 students (optional) •Computers with internet access (1 per group)

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6. Staying motivated	5 blocks	This topic deals with understanding motivation and exploring strategies that help maintain motivation. Students learn that setting goals can support effective effort and learning, even in the face of challenging problems such as the one they tackle in this topic.	<ul style="list-style-type: none"> •Student Activity Sheets •Chart paper and markers
7. Your mindset	5-6 blocks	In this topic, students explore how holding the belief that they can get smarter with hard work and effective effort can impact their motivation and achievement. This topic introduces students to the ideas of attribution theory by exploring productive and counterproductive mindsets and the reasons students give for their successes and challenges.	<ul style="list-style-type: none"> •Student Activity Sheets •Chart paper and markers
8. What is good communication?	6 blocks	This topic allows students to reflect on what they have learned in this course and see that effective communication is a key part of becoming an effective learner. Communication will prove to be an important aspect of students' academic identities. Students will also learn to be a productive part of their learning community in each of their classes.	<ul style="list-style-type: none"> •Student Activity Sheets •Chart paper and markers
9. Communicating in your learning community	5-6 blocks	In this topic, students participate in role-playing activities to strengthen and apply strategies for effective communication.	<ul style="list-style-type: none"> •Student Activity Sheets
10. Making it personal	6 blocks	In this topic, students internalize the ideas they have been learning about in this course, including the malleability of intelligence and the importance of effective effort. Students begin by writing a personal letter and end with a presentation that can be made to other students at the school.	<ul style="list-style-type: none"> •Student Activity Sheets •Chart paper and markers •Video camera (optional)
11. Applying AYD in your classes	4-5 blocks	This topic will help students consolidate the ideas they have been learning about in this course and think about how what they are learning in this class can help them become a more effective learner in all of their classes. All students are encouraged to participate in a short post-survey of their attitudes and beliefs.	<ul style="list-style-type: none"> •Student Activity Sheets •Chart paper and markers

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Problem-solving content			
12. Problem solving using AYD ideas	5 blocks	Students apply the ideas learned in this course to problems involving recognizing patterns, algebraic thinking, and geometric dissections.	<ul style="list-style-type: none"> • Student Activity Sheets • Chart paper and markers • Computers with internet access
13. Developing persistence	6 blocks	The materials in this topic support students as they work through a structured set of problems that allow all students to experience success in the first levels and experience significant challenge in the higher levels. The idea is that all or most students will struggle with one or more levels in the scenario.	<ul style="list-style-type: none"> • Student Activity Sheets • Chart paper and markers • Computers with internet access
14. Mini forensic science problem	4 blocks	Students solve a problem from forensics. They must sift through clues and different representations of data to find a satisfactory solution. Students focus on the importance of assembling and presenting evidence to justify conclusions. They learn that not every problem has a clear-cut and definite solution, and they see that being able to defend a solution is an important part of the problem-solving process.	<ul style="list-style-type: none"> • Student Activity Sheets • Chart paper and markers • Computers with internet access
15. Complex forensic science problem	7-10 blocks	Students continue to strengthen their communication and problem-solving skills as they collaborate to find a solution to the complex problem. Students also develop group presentations to explain and justify their reasoning and solution strategies, and to link what they learned about growing the brain, effective effort, and communication to the way they solved the complex problem.	<ul style="list-style-type: none"> • Student Activity Sheets • Graphing calculators (optional) • Algebra tiles • Chart paper • Markers • Computers with internet access